

AMENDMENTS TO THE CLAIMS

1-89. (canceled)

90. (currently amended) Apparatus comprising an implantable tubular cuff, the cuff:

shaped so as to define: (a) a longitudinal slit having a first edge and a second edge, and
(b) at least one hole in a vicinity of the first edge; and

comprising at least one protrusion, which is coupled to the cuff in a vicinity of the second edge, and is adapted to hold the first and second edges together when the protrusion is passed through the hole and when the cuff is disposed within a body of a subject and surrounding longitudinal tissue of the subject,

wherein the cuff comprises two electrodes and an insulating element disposed therebetween,

wherein the cuff comprises a first flexible resilient material, and

wherein the insulating element comprises a second flexible resilient material, the first material having a hardness different from a hardness of the second material.

91. (original) Apparatus according to claim 90, wherein the cuff is shaped so as to define a plurality of holes in the vicinity of the first edge, and wherein the cuff comprises a plurality of protrusions, which are coupled to the cuff in the vicinity of the second edge, and are adapted to hold the first and second edges together when each of the protrusions is passed through a respective one of the holes.

92. (original) Apparatus according to claim 90, wherein the cuff comprises at least one electrode.

93. (currently amended) Apparatus according to claim 106 ~~[[90]]~~, wherein the cuff comprises two electrodes and an insulating element disposed therebetween.

94. (original) Apparatus according to claim 93, wherein the cuff comprises a first flexible resilient material, and wherein the insulating element comprises a second flexible resilient material, the first material having a hardness different from a hardness of the second material.

95. (original) Apparatus according to claim 90, wherein the cuff comprises a tab coupled to the first edge, the tab configured to aid in drawing the protrusion through the hole when the tab is moved toward the protrusion.

96. (original) Apparatus according to claim 90, wherein the cuff comprises at least one flexible resilient material having a Shore D hardness between about 4 and about 80.

97. (currently amended) ~~Apparatus according to claim 90;~~ Apparatus comprising an implantable tubular cuff, the cuff:

shaped so as to define: (a) a longitudinal slit having a first edge and a second edge, and (b) at least one hole in a vicinity of the first edge; and

comprising at least one protrusion, which is coupled to the cuff in a vicinity of the second edge, and is adapted to hold the first and second edges together when the protrusion is passed through the hole and when the cuff is disposed within a body of a subject and surrounding longitudinal tissue of the subject,

wherein the cuff comprises a first flexible resilient material in a vicinity of the hole, and a second flexible resilient material, the first material having a hardness different from a hardness of the second material.

98. (original) Apparatus according to claim 90, wherein the cuff comprises a first flexible resilient material in a vicinity of the protrusion, and a second flexible resilient material, the first material having a hardness different from a hardness of the second material.

99. (previously presented) Apparatus according to claim 90, wherein the cuff comprises a filament coupled to the protrusion.

100. (original) Apparatus according to claim 99, wherein the filament is formed as an integral portion of the cuff.

101. (original) Apparatus according to claim 99, wherein the cuff is configured so that when the filament is drawn through the hole, the protrusion is drawn through the hole thereafter.

102. (original) Apparatus according to claim 90, wherein the tissue includes a nerve of the subject, and wherein the cuff is adapted to be placed around the nerve.

103. (original) Apparatus according to claim 90, wherein the tissue includes a blood vessel of the subject, and wherein the cuff is adapted to be placed around the blood vessel.

104. (original) Apparatus according to claim 90, wherein the tissue is selected from the list consisting of: a muscle of the subject, a tendon of the subject, a ligament of the subject, an

esophagus of the subject, intestine of the subject, and a fallopian tube of the subject, and wherein the cuff is adapted to be placed around the selected tissue.

105. (original) Apparatus according to claim 90, wherein the first edge comprises a flap, adapted to come in contact with a portion of the cuff in the vicinity of the second edge when the first and second edges are held together.

106. (currently amended) ~~Apparatus according to claim 105,~~ Apparatus comprising an implantable tubular cuff, the cuff:

shaped so as to define: (a) a longitudinal slit having a first edge and a second edge, and (b) at least one hole in a vicinity of the first edge; and

comprising at least one protrusion, which is coupled to the cuff in a vicinity of the second edge, and is adapted to hold the first and second edges together when the protrusion is passed through the hole and when the cuff is disposed within a body of a subject and surrounding longitudinal tissue of the subject,

wherein the first edge comprises a flap, adapted to come in contact with a portion of the cuff in the vicinity of the second edge when the first and second edges are held together,

wherein, when no external force is applied to the cuff, the flap forms an angle of between about 90 and about 180 degrees with a surface of the cuff in the vicinity of the first edge.

107. (original) Apparatus according to claim 106, wherein the flap comprises a tab, configured to help draw the protrusion through the hole when the tab is moved toward the protrusion.

108. (previously presented) Apparatus according to claim 90, wherein each of the protrusions comprises a head portion and a neck portion, the head portion having a perimeter greater than a perimeter of the neck portion.

109. (original) Apparatus according to claim 108, wherein a perimeter of the head portion is greater than a perimeter of the hole.

110. (original) Apparatus according to claim 108, wherein the protrusion is adapted to be passed through the hole such that the head portion passes through the hole, and the neck portion remains substantially in the hole.

111. (original) Apparatus according to claim 108, wherein the head portion has an initial shape prior to being passed through the hole, and is adapted to (a) assume a different shape while being

passed through the hole, and (b) substantially return to the initial shape thereof after being passed through the hole.

112. (original) Apparatus according to claim 108, wherein the head portion comprises a first flexible resilient material having a first hardness, and wherein a portion of the cuff excluding the head portion comprises a second flexible resilient material having a second hardness, the first hardness different from the second hardness.

113. (original) Apparatus according to claim 108, wherein the cuff comprises a filament coupled to the neck portion.

114. (original) Apparatus according to claim 113, wherein the cuff is configured so that when the filament is drawn through the hole, the head portion is drawn through the hole thereafter.

115. (withdrawn) A method for enclosing a section of longitudinal tissue of a subject with a tubular cuff, the method comprising:

separating a first edge of a longitudinal slit defined by the cuff from a second edge of the slit;

placing the cuff within a body of the subject around the section of the tissue; and

passing at least one protrusion coupled to the cuff in a vicinity of the first edge, through at least one hole defined by the cuff in a vicinity of the second edge, so as to hold the first and second edges together.

116. (withdrawn) A method according to claim 115, wherein passing the at least one protrusion through the at least one hole comprises passing a plurality of protrusions coupled to the cuff in the vicinity of the first edge, through a plurality of respective holes defined by the cuff in the vicinity of the second edge, so as to hold the first and second edges together.

117. (withdrawn) A method according to claim 115, comprising applying current to the tissue in a vicinity of the cuff.

118. (withdrawn) A method according to claim 115, comprising sensing an electrical potential of the tissue in a vicinity of the cuff.

119. (withdrawn) A method according to claim 115, wherein placing the cuff comprises at least partially sealing the section of the tissue surrounded by the cuff from a portion of the tissue not surrounded by the cuff.

120. (withdrawn) A method according to claim 115, wherein passing the protrusion through the hole comprises moving a tab coupled to the second edge toward the protrusion.

121. (withdrawn) A method according to claim 115, wherein passing the protrusion through the hole comprises drawing a filament coupled to the protrusion through the hole.

122. (withdrawn) A method according to claim 115, wherein the tissue includes a nerve of the subject, and wherein placing the cuff around the section of the tissue comprises placing the cuff around a section of the nerve.

123. (withdrawn) A method according to claim 115, wherein the tissue includes a blood vessel of the subject, and wherein placing the cuff around the section of the tissue comprises placing the cuff around a section of the blood vessel.

124. (withdrawn) A method according to claim 115, wherein the tissue is selected from the list consisting of: a muscle of the subject, a tendon of the subject, a ligament of the subject, an esophagus of the subject, intestines of the subject, and a fallopian tube of the subject, and wherein placing the cuff around the section of the tissue comprises placing the cuff around a section of the selected tissue.

125. (withdrawn) A method according to claim 115, wherein passing the protrusion through the hole comprises bringing a flap of the second edge in contact with a portion of the cuff in the vicinity of the first edge.

126. (withdrawn) A method according to claim 115, wherein passing the protrusion through the hole comprises passing a head portion of the protrusion through the hole such that a neck portion of the protrusion remains substantially in the hole, the head portion having a perimeter greater than a perimeter of the neck portion.

127. (withdrawn) A method according to claim 126, wherein passing the head portion through the hole comprises causing the head portion, while being passed, to assume a shape different from an initial shape of the head portion prior to its being passed through the hole, such that the head portion substantially returns to the initial shape after being passed through the hole.

128. (withdrawn) A method according to claim 115, wherein passing the protrusion through the hole comprises drawing a filament coupled to the neck portion through the hole.

129. (withdrawn) A method for stimulating a vagus nerve of a subject, comprising:

applying to the vagus nerve a first electrode device, the first electrode device having a first characteristic diameter;

driving the electrodes of the first electrode device to apply a current to the vagus nerve;

measuring a reduction in heart rate of the subject responsive to driving the electrodes of the first electrode device to apply the current;

determining whether the reduction in heart rate is less than about 10%; and

responsive to determining that the reduction in heart rate is less than about 10%, removing the first electrode device from the nerve and applying to the vagus nerve a second electrode device, the second electrode device having a second characteristic diameter smaller than the first characteristic diameter.

130. (withdrawn) A method according to claim 129, wherein applying the first electrode device comprises:

applying the first electrode device, wherein the first characteristic diameter corresponds to a characteristic distance of electrodes of the first electrode device from an axis of the nerve when the first electrode device is applied to the nerve, and wherein the second characteristic diameter corresponds to a characteristic distance of electrodes of the second electrode device from an axis of the nerve when the second electrode device is applied to the nerve, the second characteristic distance being smaller than the first characteristic distance.

131. (withdrawn) A method according to claim 129, wherein applying the first electrode device comprises:

applying the first electrode device, wherein the first characteristic diameter corresponds to a characteristic distance of an insulating element of the first electrode device from an axis of the nerve when the first electrode device is applied to the nerve, and wherein the second characteristic diameter corresponds to a characteristic distance of an insulating element of the second electrode device from an axis of the nerve when the second electrode device is applied to the nerve, the second characteristic distance being smaller than the first characteristic distance.